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TWO NEW SUBSPECIES OF BIRDS FROM THE PHILIPPINES AND COMMENTS ON THE VALIDITY OF TWO OTHERS

By S. Dillon Ripley and D. S. Rabor

Secretary, Smithsonian Institution, Washington, D. C. 20560
Research Professor in Biology, Institute of Research, Mindanao State University, Marawi City, Philippines

In the course of visits to southern Mindanao from 1963 to 1966, Professor D. S. Rabor collected a number of specimens now at the U. S. National Museum. Among these collections which will eventually be reported on as part of a work on Mindanao birds are new subspecies of an owl and a babbler and series of two other species which demonstrate the invalidity of previously described subspecies.

In the collection is one specimen of a Scops Owl from Mindanao which differs from all described subspecies of this widespread species and may be known as:

Otus scops mirus new subspecies

Holotype: USNM No. 519154, adult male collected by D. S. Rabor 19 April 1963, on Hilong-hilong Peak, Agusan Province, Mindanao Island, Philippines. Original No. 35409.

Description: This is a typical small *Otus scops* in size and color tone, similar to *O. s. malayanus*, except more coarsely barred and streaked with blackish, the black streaks particularly heavy on the head, broader and wider even than *manadensis*. The white feathers on the median wing coverts are heavily tipped with black and brown, not clear black as in *sunia, malayanus* and *distans*. The wing formula shows tenth (outer) and first primaries equal in length, sixth and seventh equal and longest, eighth longer than fifth, and fourth and ninth equal.

Below, this single specimen shows a good deal of white on the abdomen and undertail coverts, similar to *malayanus* although the chest is coarsely streaked not finely vermiculated as in that subspecies. The tarsus is feathered for more than half its length, the distal portion is bare.

Measurements: Wing 131, tail 58.5, culmen (from cere) 13, tarsus 22 mm.

Range: Known only from one specimen from the type locality some twenty miles northeast of Butuan, northeastern Mindanao.

Etymology: The name is from the Latin *mirus,* meaning unusual or striking.

Remarks: In 1941, Delacour (p. 41) questioned whether certain Philippine forms of the Scops owl, listed by Peters (1949, pp. 92, 93) properly belonged to the species *Otus scops.* The forms then known to Peters consisted of: *calayensis* (Calayan); *longicornis* (Luzon); *mindorensis* (Mindoro); *romblonis* (Banton and Romblon); *cuyensis* (Cuyo) and *mantananensis* (from Mantanani Island, off Sabah, north Borneo). Peters (1940, p. 96) kept a separate species, *Otus manadensis* for the forms *sibutuensis* (Sibutu); *steerei* (Tumindao); *manadensis* (Celebes or Sulawesi); and related forms. About the same time Stresemann (1939, pp. 320, 321) pointed out quite correctly that *manadensis* from Celebes is indeed a subspecies of *Otus scops* and probably *siaoensis* should be considered a synonym of it. Related forms included by Stresemann (1940, pp. 429, 430) are *Otus scops mendeni* Neumann from Peling and *O. s. albiventris* from the Lesser Sundas.

The only Moluccan form examined (Ripley, 1959, p. 4) was *Otus leucospilus,* and we would keep this as a separate species *contra* Peters.

The Philippine owls of this assemblage have been considered by Hachisuka [1934 (III), pp. 56–62] to belong to several species. His arrangement is shown in Table 1.

Recently one of us (S. D. R.) has had the benefit of discussions with Dr. A. L. Rand and has examined the material in the Field Museum collection as well as Dr. Rand's manuscript notes. From this discussion it would appear that *longicornis* does not belong with the *scops* assemblage but is closer to *bakkamoena,* as is *whiteheadi* from Luzon. On the other hand, *mindorensis,* still known from only one specimen from Mindoro in the British Museum, is perhaps closer to *Otus scops* and belongs with those species closely related to the *scops* assemblage.

Regarding the *scops* group of owls then, we would assume that aside from *Otus scops mirus,* one should place the offshore island forms as subspecies of *Otus elegans* of the Riukyu Islands with the following subspecies, *Otus elegans elegans*; *e. botelensis*; *e. calayensis* (synonym *batanensis*); *e. romblonis*; *e. cuyensis*; *e. sibutuensis* (synonym *steerei*); and *e. mantananensis.*

Otus elegans is a larger species (wing mostly over 155 and up to 175 mm) than *Otus scops* with more uniform dark upperparts and underparts, very finely vermiculated throughout. In some specimens the abdomen is paler, but always with vermiculations present.

Next to the Mindanao form then we would place *Otus scops manadensis* (synonym *siaoensis*); with related subspecies, *sulaensis, mendeni, kalidupae, morotensis, albiventris,* and *tempestatis.* We would leave *Otus mindorensis* as a separate species.

Thus the derivation of *scops*-like owls in the eastern Sunda and Moluccan islands including Celebes, may well have come from the Philippines via a series of invasions, the links of which seem to have been cut off. A clue is the Ryukyu and Botel Tobago forms of *elegans* found on small islands. Perhaps the presently defined species *scops* came from the north, and remnant representatives may still be discovered in Luzon to connect with this unique Mindanao form.

A Mindanao series of 3 males and 3 females of *Micromacronus leytensis* recently described by Amadon (1962, pp. 3–5) from Mt. Lobi on Leyte demonstrate that the Mindanao population represents a new subspecies.

Micromacronus leytensis sordidus new subspecies

Holotype: USNM No. 519070, adult male collected by D. S. Rabor, 2 Feb. 1964, on Mt. Matutum, Tupi, Cotabato Province, Mindanao Island, Philippines, between 3,300 and 4,300 feet above sea level. Original No. 39878.

Description: This form is larger and duskier, less bright in tone than *leytensis* described from Mt. Lobi (1,500 ft. a.s.l.) on Leyte Island. The specimens of *sordidus* have a slimmer bill, pale at the base, not all black. They are pale greenish olive below, and lack the yellow forehead and supercilium. The elongated white back and flank plumes are similar to *leytensis* but shorter, not reaching the end of the tail. Females are slightly paler below than are males.

Measurements (in millimeters)

		wing	tail	culmen	weight
M. l. leytensis (type)	male	40.5	27	12	—
	female	41	28	10.5	—
M. l. sordidus (type)	male	47	31	10	6.1 gms
	2 males	43, 46	30, 31	10, 10	5.5, 6.5
	2 females	43, 44	30, 31	10, 11	5.5, 5.9

Etymology: The name is from the Latin *sordidus,* referring to the dull coloration.

A juvenile female with smaller measurements and soft, rather fluffy plumage (June 27) would appear to be not long out of the nest. (Wing, 43; tail, 26.5; culmen, 9 mm; weight, 5.5 gms). Compared to the two adult females it is more buffy above, with warm yellowish cinnamon edges to the wing feathers. The specialized feathers of the back are present although softer and shorter; not exceeding the wings in length. Below, this specimen is dull whitish with traces of warm brown on the breast and flanks. The specialized feathers of the flanks appear as soft white filoplumes. As Amadon notes, this species would be difficult to characterize as a babbler (Muscicapidae, Timaliinae). Perhaps only the specialized feathers prevent it from being thought of as an uniquely

TABLE 1. Arrangement of owl species from Hachisuka to this paper

Hachisuka (1934)	Peters (1940)	Ripley and Rabor
Otus manadensis sibutuensis	*Otus manadensis sibutuensis*	*Otus elegans sibutuensis* (syn. *steerei*)
Otus manadensis steerei	*Otus manadensis steerei*	Synonym of *sibutuensis*
Otus manadensis manadensis	*Otus manadensis manadensis*	*Otus scops manadensis* (syn. *siaoensis*)
Otus manadensis magicus	*Otus manadensis magicus*	*Otus scops magicus*
Otus manadensis albiventris	*Otus manadensis albiventris*	*Otus scops albiventris*
Otus cuyensis cuyensis	*Otus scops cuyensis*	*Otus elegans cuyensis*
Otus cuyensis romblonis	*Otus scops romblonis*	*Otus elegans romblonis*
Otus longicornis longicornis	*Otus scops longicornis*	*Otus* (*bakkamoena*) *longicornis*
Otus longicornis mindorensis	*Otus scops mindorensis*	*Otus mindorensis* (part of *scops* superspecies)
Otus calayensis	*Otus scops calayensis*	*Otus elegans calayensis* (syn. *batanensis*)

plumaged leaf-bird (Aegithinidae). Basally these specialized feathers appear somewhat downy in texture and in this area the soft barbs are bordered with black, a point not mentioned by Amadon although it appears in his photograph (1962, p. 4, fig. 1).

Rhabdornis inornatus Ogilvie-Grant

A series of this species taken on Leyte Island from 1,500–2,500 feet altitude by Rabor between 31 May and 1 July measure:

	wing	tail	culmen
3 ♂♂	85–87	53–55 (tail moult May 31)	19–21
2 ♀♀	85, 86.5	53, 54	17, 18

These specimens agree in size and color with *R. inornatus inornatus* from Samar.

In addition Rabor has collected the species on Mindanao; in Surigao del Sur in May, in Agusan, Mt. Hilong-hilong, in April, and in Cotabato on Mt. Matutum in February. Altitudes ranged from 1,100 feet in Surigao to 5,000 feet on Hilong-hilong peak. Two subspecies have been described from Mindanao, *alaris* Rand from southeastern Mindanao in Davao, and *zamboanga* Rand and Rabor from western Mindanao in the Zamboanga Peninsula on Mt. Malindang. The latter subspecies has been separated from *alaris* on the basis of duller brown coloration. There is no difference in size (Rand and Rabor, 1960, pp. 436–437). Based on these facts we do not feel that the presence of two subspecies on Mindanao is maintained by this new series from northern and southeastern Mindanao. Freshly moulted August birds from Davao Province appear more ruddy-brown, but worn birds are inseparable throughout the island. Ruddy or chocolatey-backed birds appear also from the west in the Zamboanga series. Intermediate birds appear in our new series. The differences thus appear too small to us to warrant separation.

Chloropsis flavipennis (Tweedale)

Among interesting species found by Rabor was *Chloropsis flavipennis*, known from Cebu where it has not been recorded in recent years and may be extinct (Rabor, 1959, p. 40). Currently recorded only from the islands of Cebu and Mindanao (Delacour *in* Peters, 1960, p. 303) it was a surprise to find also this species on the island of Leyte, from whence a series was secured.

The Leyte birds were found from 800–2,500 feet altitude on Mt. Lobi and the Lobi range, Burauen. An August female is noted as nesting. In addition specimens were taken on Mindanao at the following localities: Sibahay, Lanuza, Surigao del Sur, near sea level; Mount Mayo, Mati, Davao Province; and Mt. Hilong-hilong, Agusan Province from 500–4,200 feet altitude.

From these specimens we are inclined to feel that *flavipennis* is a

monotypic species, and that it is unwise to separate the Mindanao birds as *mindanensis* Salomonsen (1953, p. 270) named on the basis of larger size alone. For comparison, we list below the measurements of the specimens available (including specimens kindly loaned by the Carnegie Museum, and the American Museum of Natural History).

	wing	tail	culmen (to base of skull)
Cebu 8 ♂♂	88 –97(93)	68(worn)–75(72)	23.5–25(24.5)
" 3 ♀♀	85 –91	68–71.5	24 –25
Leyte 4 ♂♂	91 –98(96)	69–73	23.5–24
" 3 ♀♀	89.5–90	66–68	22 –24
Mindanao 3 ♂♂	98 –101	71–80	24 –25
" 3 ♀♀	89 –95	74–77	24 –25

There is a slight continuous cline in size from Cebu to Leyte to Mindanao with more than 25 per cent overlap when the sexes are compared, males with males or females with females.

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